



October 22, 2002

By Electronic Delivery

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: *Written Ex Parte*
Review of the Section 251 Unbundling Obligations of Incumbent Local
Exchange Carriers – CC Dockets No. 01-338, 96-98, and 98-147

Dear Ms. Dortch:

Over the past year, the Bell Operating Companies (“BOCs”) have suggested in various contexts that customers would not be harmed if competitive local exchange carriers (“LECs”) were unable to provide digital subscriber line (“DSL”) service because sufficient intermodal competition for broadband services exists. In fact, as explained below, satellite, fixed wireless, and mobile wireless providers do not provide meaningful competition to the incumbent LECs for either business or residential broadband services, and even cable competition is limited. The majority of customers live in areas that have at most one or two broadband suppliers,¹ and, for some customers, competitive providers offer the only source of broadband services. If WorldCom and other competitive LECs are stripped of their ability to offer such services, consumers will face, at best, a duopoly, and, in many cases, a monopoly. As a result, many customers will not be able to enjoy the benefits of broadband competition – including better service, lower prices, and more innovation – unless competitive DSL remains a viable alternative. Consequently, it is imperative that the Commission ensure that competitive LECs have unbundled access to the network elements they need to provide DSL services.

¹ See Reply Comments of WorldCom, Inc., CC Docket No. 01-337, at 2, 4, nn.2, 11 (filed April 22, 2002), *citing, inter alia*, Comments of California PUC, CC Docket No. 01-338, at 7-8 (“California PUC Comments”); *see also, e.g.*, Richard A. Chandler, A. Daniel Kelley, and David M. Nugent, *The Technology and Economics of Cross-Platform Competition in Local Telecommunications Markets*, Att. A to Comments of WorldCom, Inc., CC Docket No. 01-338, at 75 (filed April 4, 2002) (“HAI Report”).

I. Business End-User Customers Lack Viable Alternatives for Business-Grade DSL Services

Traditionally, the Commission has separated users of telecommunications services into two broad categories: the larger business market and the mass market, which includes both residential consumers and small businesses. For broadband services, however, these categories may not be useful in guiding policy decisions because, as the business community itself has explained, business end-user customers – regardless of size – require a higher level of security and reliability for broadband services than residential consumers.² As a result, residential-grade broadband services, even when available to small and medium enterprises (“SME”), small or home offices (“SOHO”), or branch offices of larger enterprise customers, do not meet the needs of these customers. At the same time, services such as DS-1 or DS-3 private line services that are used heavily by the traditional “larger business” end-user customers, do not meet the needs of the SME/SOHO/branch office customers either.³ Consequently, in assessing whether UNEs should be available to competitive DSL LECs, the Commission should separately consider the alternatives available to users of business-grade DSL services. Users of business-grade DSL range from small offices to enterprise businesses with multiple locations.⁴

A. Cable Modem Is Not A Viable Substitute for Business-Grade DSL

Cable modem service is not well-suited for most business customers for a number of reasons, including limitations in geographic availability as well as insufficient service quality, reliability, and security. As Ad Hoc and others have documented, most cable companies target their buildouts towards residential areas; thus, cable-based high-speed Internet access is rarely available to business customers.⁵ J.P. Morgan previously reviewed growth prospects for the

² Comments of Ad Hoc Telecommunications Users Committee at 7-8, CC Docket No. 01-337 (filed March 1, 2002) (“Ad Hoc Broadband Comments”). For example, business users often require “service level agreements” or other quality guarantees typically not demanded by residential users.

³ See, e.g., *Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control*, 13 FCC Rcd 18025, ¶ 26 (1998).

⁴ Larger businesses often have numerous smaller business locations, “includ[ing] retail stores, automobile dealerships, travel agencies, bank branches, transportation and dispatch facilities, among others,” that require high-speed access to corporate data networks. See Ad Hoc Broadband Comments at 7.

⁵ See, e.g., Tod A. Jacobs, J.P. Morgan Securities Inc., *Industry Analysis: Telecom Services 2001, A Comprehensive Long-Term Forecast of the U.S. Telecom Services Industry* at 32

business cable modem marketplace, and concluded that while growth percentages will be high, actual market penetration will be minimal compared to DSL for businesses. By 2006, J.P. Morgan predicts that 112,000 businesses will be served by cable modems, compared to 4,446,000 businesses served by DSL.⁶

Even if it were ubiquitously available – which it is not – cable modem service also suffers from service quality and reliability problems, stemming from its shared bandwidth architecture. In a business environment, where many users are on the same network at a peak time, cable modems lose signal strength.⁷ Moreover, without appropriately configured firewalls, shared networks also pose security risks to business customers.⁸ Analysts have noted that “its variable speed, lack of vendor guarantees, and other reliability concerns have made [cable modem service] an unpopular choice for businesses.”⁹

Although some cable providers have attempted to upgrade their broadband offerings to make them more attractive to business customers, they have achieved little success to date, and are not likely to fare better in the near future.¹⁰ Moreover, even if cable modem service

(Nov. 2, 2001) (the broadband business market “is largely expected to belong to DSL”) (“J.P. Morgan”); *see also* HAI Report at 37; Ad Hoc Broadband Comments at 10.

⁶ J.P. Morgan at 33.

⁷ Ad Hoc Broadband Comments at 18 (noting various service quality problems with cable modem service, including lack of back-up power, inconsistent transmission speeds, and lower reliability standards).

⁸ Bradley Mitchell, “Computer Networking: DSL vs. Cable Modem Comparison” (last visited Oct. 17, 2002), *available at*: <<http://Compnetworking.About.com/library/weekly/aa021101a.htm>>; *see also* Ad Hoc Broadband Comments at 19 (discussing security issues).

⁹ Barbara Krasnoff, “Bet on Broadband” (Nov. 29, 2001), *available at*: <<http://www.SmallBusinessComputing.com/buyersguide/article.php/683681%20>>.

¹⁰ *See, e.g.*, Dan Sweeney, “Cable’s Plumb Position: For Many Business Customers, the Cable Industry Offers the Last Chance for Broadband Competition” at 32, *America’s Network* (July 1, 2002) (“Sweeney Article”) (“Whatever the potential of [cable] networks to support a range of premium business services, those networks have not in the main evolved to the point where they can do so now.”); Dev Gupta, “Cable’s New Mantra: Taking Care of Business,” *Multichannel News* (Oct. 8, 2001), 2001 WL 8716799 (“MSOs are reluctant to aggressively market the cable modem to business customers who use up a lot of bandwidth and need guaranteed services and symmetrical communications capabilities to support mission-critical business operations.”).

providers were to overcome these bandwidth, security, and access hurdles, lack of cable modem equipment for business networks, cable access to multi-tenant environments, and other issues continue to hinder deployment of cable modem service to business customers.¹¹ It is thus clear that cable providers are not likely to offer a viable alternative for broadband access to businesses any time in the near future.¹²

B. Neither Broadband Satellite Nor Wireless Service Provides A Widespread Alternative to Business-Grade DSL

Broadband satellite service today is not widely available to business customers, suffers from significant capacity limitations, is prone to signal fading caused by rainfall, and requires subscribers to purchase equipment that is much more expensive than DSL or cable modem.¹³ In

¹¹ See Comments of WorldCom, Inc., CC Docket No. 01-338, at 43 (filed Apr. 4, 2002) (“WorldCom UNE Comments”); *see also* Sweeney Article (“There’s really not a lot [of equipment for hybrid fiber/coax plant] out there for cable operators among the next generation service offerings, . . . and [equipment manufacturers’] failure to win over the cable operators strongly suggests that the MSOs are indeed hesitant at this point to make the major investments necessary to vie with the incumbents in reaching the business customer.”).

¹² SBC claims that “many small business users receive broadband service from cable” companies and that “among businesses with fewer than 100 employees, those with broadband Internet access are evenly split between DSL and cable modem service.” In support of this argument, SBC cites two sources. See Reply Comments of SBC Communications, CC Docket No. 01-338, at 90, n.304 (filed July 17, 2002) (“SBC Reply Comments”). The first source indicates that, of the business customers with fewer than 100 employees that use broadband, only 10% receive service from cable – hardly proof that “many small business users receive broadband service from cable.” See Jane Applegate, “Speeding on Net with Broadband,” *Chicago Sun-Times*, at 46 (Feb. 6, 2001) (“Applegate Article”). The second source involved a survey of 100 “medium size” businesses (from 50 to 249 employees) and had a margin of error of up to 10%. The report itself further noted that its results were “surprising . . . considering cable modems typically do not target business markets” and that they “may raise questions as to the nature of the companies surveyed.” See Simon Flannery, *et al.*, Morgan Stanley Equity Research, “Annual Telecom Services Survey: The Customer Speaks,” at 31, 47 (Feb. 26, 2002).

¹³ See HAI Report at 76-78. SBC’s claim that “many small business users receive broadband service from . . . satellite” is not supported by facts. See SBC Reply Comments at 90-91, nn.310, 311 (describing DirecPC/DirecWay and StarBand satellite broadband offerings). StarBand itself describes its service as “NOT currently right for . . . [c]ommercial/business usage” (emphasis in original). See StarBand, “Q&A – StarBand Facts,” *available at*: <<http://www.starband.com/faq/starbandfacts.htm>> (last viewed Oct. 21, 2002). And SBC’s own sources dismiss satellite broadband as an alternative for business customers. See Applegate Article at 46

the words of one critic: “[t]he runt of the broadband litter has always been satellite. Characterized by difficult, expensive installations, notoriously poor service, and suspect performance, the service meant for anyone who can’t get cable or DSL has ceased to be a serious option.”¹⁴

Mobile and fixed wireless services also suffer from various constraints. Second generation mobile wireless services can support only modest data rates, typically about 10 kbps.¹⁵ Although third generation services will offer data rates exceeding 144 kbps, these rates represent an overall radio channel data rate. Thus, the average per user rate will be much lower, probably between 50 and 100 kbps.¹⁶ As a result, capacity and service-quality constraints make it unlikely that significant numbers of business broadband service users will switch to mobile wireless services.¹⁷

At present, fixed wireless service providers, operating primarily in the MDS and ISM bands, face significant technological and capacity limitations. For example, the equipment currently used for MDS requires a line of sight between the consumer premise and the base station. As a result, it is necessary to affix external antennas to the building being served. Zoning restrictions limiting the height of such antennas and the unwillingness of landlords to provide access to their rooftops have hindered carriers’ ability to provide MDS service. Further,

(“For those outside the reach of both DSL and cable modems, there is satellite, offered by companies like StarBand and DirecPC, but both are now still focused on residential customers and tend to average \$500 or more to install.”); *see also Application of EchoStar Communications Corp., General Motors Corp., and Hughes Electronics Corp. (Transferors), and EchoStar Communications Corp. (Transferee)*, CS Docket No. 01-348, Hearing Designation Order, ¶ 239 & n.569 (rel. Oct. 18, 2002) (FCC 02-284) (“*DirecTV Order*”) (discussing possible issues surrounding StarBand’s continued viability and its subsequent filing for bankruptcy).

¹⁴ See Brad Grimes, “Ditch Your Dial-Up,” *PC World* (Feb. 2002), available at: <<http://www.pcworld.com/features/article/0,aid,73865,pg,3,00.asp>>; *see also* John R. Quain, “A Satellite and Thou: Web Browsing in the Wilds,” *New York Times* (Oct. 17, 2002) (discussing limitations of satellite broadband services, including first year installation and service costs of \$1,300 or more, slower upstream speeds, variations in downstream speeds due to shared access, transmission latency, and weather-related service outages).

¹⁵ HAI Report at 49.

¹⁶ *Id.* at 50.

¹⁷ *Id.* at 50-51.

MDS providers have sufficient spectrum capacity to serve only a limited portion of potential broadband subscribers.¹⁸

As with cable modem service, broadband satellite and wireless services today are not widely available to business customers. Due to capacity and other technological limitations discussed above, it is likewise unlikely that they will be widely available in the foreseeable future.

C. DSL Remains the Option of Choice for Business Broadband Users

DSL remains the leading choice of broadband technology for business subscribers – 59% view DSL “as the most convenient technology to adopt.”¹⁹ Despite this demand, incumbent LECs do not offer business-grade DSL unbundled from Internet access services.²⁰ Rather, incumbent LECs have generally designed their DSL network architecture and product offerings so as not to include various business-grade features, such as symmetric bandwidth capabilities, low over-subscription rates, dry copper loop service, static IP addressing and routed CPE, and service level guarantees.²¹

SBC acknowledges that the incumbent LECs have not focused on deploying business-grade DSL.²² Even so, SBC claims that small businesses have more competitive alternatives than residential users simply because they are willing to pay more for broadband services.²³ The question, however, is not willingness to pay, but actual availability of service options that meet business users’ needs. In fact, there currently are no widespread competitive alternatives to incumbent LEC data services for business customers.²⁴

¹⁸ HAI estimates that MDS providers have the capacity to serve only 5-10% of wireline broadband subscribers in larger markets. *Id.* at 78.

¹⁹ Michael Pastore, “Business Installations Will Lead DSL Providers” (Dec. 3, 2001), available at: <http://cyberatlas.internet.com/markets/broadband/article/0,,10099_932901,00.html>.

²⁰ See WorldCom UNE Comments at 40-41.

²¹ Declaration of Ian Graham ¶¶ 20, 38, Att. C to WorldCom UNE Comments (“Graham Declaration”). The incumbents’ decision not to offer business-grade DSL may be motivated by a desire to protect their profits from other, higher-margin products, such as T-1 service. *Id.*

²² SBC Reply Comments at 101.

²³ *Id.* at 91.

²⁴ Ad Hoc’s members report that viable competitive alternatives to incumbent LEC data

Although WorldCom and other competitive carriers seek to offer business-grade DSL services, their ability to do so is completely dependent on the availability of unbundled network elements. For example, WorldCom offers an Enterprise DSL product to businesses that allows them to access WorldCom's frame relay and ATM services utilizing DSL.²⁵ In addition, WorldCom provides businesses with high-quality, reliable high-speed Internet access services.²⁶ WorldCom's business DSL products are designed to meet the needs of different businesses that demand high-speed access services. However, WorldCom cannot offer its innovative products to businesses without access to UNEs – especially the loop.²⁷ Thus, if the incumbent LECs succeed in their attempts to eliminate unbundling requirements necessary for DSL, the only meaningful alternative for cost-effective, business-grade broadband service will be eliminated.

II. If WorldCom and Other Competitive LECs Are Stripped of Their Ability to Offer DSL Services, Consumers Will Face, At Best, A Duopoly, and, In Many Cases, A Monopoly

Intermodal alternatives have not fostered significant competition for residential broadband services either. Although more widely available than satellite or wireless, the availability of cable modem service at best means that residential customers are confronted with a duopoly. As demonstrated below, it is clear – as a matter of fact, economics, and law – that duopolies do not constitute the kind of vigorous competition envisioned by the 1996 Act. The only way to foster such competition for residential broadband services is to allow competitive LECs to continue to offer DSL as an alternative to the duopolistic *status quo*.

A. Satellite and Wireless Are Not a Viable Option for the Vast Majority of Residential Customers

As discussed above, satellite and wireless technologies are not sufficiently widespread to provide competitive alternatives to incumbent LEC data services for the vast majority of residential customers. Although the BOCs claim that they face competition from satellite and wireless providers, their own estimates confirm that fixed wireless services are available to no

services for “Category A” (defined as capacity of 12 DS-0 channels or less, *i.e.*, ½ T-1, xDSL, etc.) and “Category B” (defined as capacity of at least one, but not more than four, DS-1 circuits) were available at fewer than 10% of members' locations. Ad Hoc Broadband Comments at 15.

²⁵ Graham Declaration ¶ 10.

²⁶ *Id.* ¶ 11.

²⁷ *See id.* ¶¶ 30-37. In providing DSL services, WorldCom deploys its own facilities and purchases the unbundled loop (including the high frequency portion of the loop) and, in some instances, transport from the incumbent LEC.

more than 3 percent of the U.S. population, and satellite and fixed wireless combined serve a total of no more than 200,000 customers.²⁸

Even if satellite and wireless alternatives were one day to become more widely available, however – which they will not for the foreseeable future – they still would suffer from significant technical, cost, and capacity limitations that would make them unsuitable for residential broadband use. As WorldCom has demonstrated, satellite-based service is prone to signal fading caused by rainfall,²⁹ subscriber equipment is much more expensive than DSL or cable modem,³⁰ and providers are unlikely to have enough capacity to serve a large number of customers.³¹ As a result, “satellite broadband is at best an alternative suited mainly for customers in rural areas or other areas where no other broadband alternative is available.”³²

²⁸ UNE Fact Report 2002 at IV-19 (Table 6), IV-21, Att. A to Comments of SBC Communications, Inc., CC Docket No. 01-338 (filed Apr. 5, 2002) (“BOC Report”); *see also* Declaration of Richard A. Chandler ¶ 4, Att. D to Reply Comments of WorldCom, Inc., CC Docket No. 01-338 (filed July 17, 2002) (“Chandler Declaration”). Although the BOCs predict rapid growth in satellite and fixed wireless broadband service, these predictions are squarely refuted by the HAI Report, which demonstrates that satellite and fixed wireless are likely to remain complementary to DSL, not develop into direct competitors. HAI Report at 76-79; *see also DirecTV Order* ¶ 239 & n. 568 (current satellite broadband services using Ku-band spectrum “may not be ‘reasonably interchangeable’ with cable modem or DSL broadband Internet access service”).

²⁹ *See* Chandler Declaration ¶¶ 4, 14-18.

³⁰ *Id.* ¶¶ 15-16; *see also DirecTV Order* ¶ 238 (monthly fees for existing satellite broadband service range from \$60-70, versus \$30-45 for DSL and cable modem, and installation and equipment costs can exceed \$700, versus \$200-250 for DSL and cable modem).

³¹ Chandler Declaration ¶ 4; *see also* Reply Comments of WorldCom, Inc., CC Docket No. 01-338, at 84-86 (filed July 17, 2002) (“WorldCom UNE Reply Comments”). Chandler also discusses the ability of a combined EchoStar/DirecTV entity to support broadband Internet access. The viability of such an effort, however, was recently called into question by the FCC. *See* News Release, CS Docket No. 01-348, at 5 (rel. Oct. 10, 2002) (“The companies have failed to substantiate that their claimed broadband benefit was likely to occur . . .”); *see also DirecTV Order* ¶ 247 (noting that use of Ka-band to offer broadband Internet services is “months, if not years, away from public availability”).

³² HAI Report at 78.

Fixed wireless also faces significant capacity and technological limitations for most residential areas.³³ As described above, current equipment requires a line of sight between the consumer premises and the base station. Many customers do not have a line of sight to the base station, and therefore cannot be served. Further, as described above, there are significant capacity limitations on fixed wireless systems. Neither satellite nor fixed wireless services provide a viable alternative to incumbent LEC residential DSL today, and it is simply not plausible that they will do so in the near future.³⁴

B. The Vast Majority of U.S. Households Face a Monopoly or Duopoly in the Provision of Broadband Services

The BOCs cite the relative shares of cable modem service and DSL as proof that intermodal competition already exists in the mass market for broadband services.³⁵ These numbers are misleading, however. The fact that cable modem penetration is higher than DSL penetration does not mean that incumbent LECs lack market power with respect to broadband services. Where cable is not provided, the incumbent LEC is a monopolist.³⁶ Where both cable and DSL are provided, incumbent LECs continue to exercise market power. In either case, there is no plausible basis for concluding that intermodal competition constrains or disciplines the incumbent LECs' exercise of market power.

In order for intermodal competition to limit market power, consumers must be able to choose from among *several* modes of broadband technology that are concurrently available within the same geographic area.³⁷ As WorldCom has previously demonstrated, however, significant numbers of consumers may have only one broadband supplier, and in many cases that

³³ See *DirecTV Order* ¶ 222 (noting that MMDS, third generation and other wireless technologies are not yet available "to any significant degree" to residential customers).

³⁴ For example, the FCC's recent order designating the EchoStar/DirecTV merger for hearing describes future "spot beam" technologies over the Ka-band as nascent and notes that continued uncertainties about the timing, scope, price, and quality of such services render any predictions about their availability within any reasonable timeframe "highly speculative." See *DirecTV Order* ¶ 227.

³⁵ Comments of BellSouth Corporation, CC Docket No. 01-338, at 39 (filed Apr. 8, 2002); Comments of Qwest Communications, CC Docket No. 01-338, at 43 (filed Apr. 12, 2002).

³⁶ The incumbent LEC is able to leverage its bottleneck control over "last mile" local facilities to constrain competition for broadband services, thus harming competitors and consumers alike.

³⁷ See Declaration of Daniel Kelley ¶¶ 29-37, Att. A to Comments of WorldCom, Inc., CC Docket No. 01-337 (filed Mar. 1, 2002) ("Kelley Broadband Declaration"); HAI Report at 82-84.

supplier will be the incumbent LEC.³⁸ Indeed, the BOC Report concedes that only about one-third of U.S. households have access to both cable modem and DSL service.³⁹ That means that two-thirds of all homes have only a single choice of broadband provider, if they have any access to broadband services at all.⁴⁰

The geographic segregation of DSL and cable modem persists today and is likely to continue in the foreseeable future because it is fueled by the disparate costs that cable companies and incumbent LECs face in specific areas. For instance, in core urban areas where short loop lengths are well-suited for DSL, cable plant tends to be older and thus more costly to upgrade for broadband service.⁴¹ As long as this type of disparity persists, cable companies are likely to continue to target areas that incumbent LECs have ruled out, and *vice versa*. For the foreseeable future, then, significant numbers of broadband subscribers will likely continue to have, at most, only a single choice of broadband provider.

C. Those Residential Customers Who Face a Duopoly in the Provision of Broadband Services Do Not Enjoy the Benefits of Competition

Even where the consumer has a choice between DSL and cable modem service, the incumbent LECs retain significant market power.⁴² Duopoly is much more likely to lead to collusion than the presence of several competitors, and economic models show that when there is

³⁸ Kelley Declaration ¶ 29; HAI Report at 75.

³⁹ BOC Report at IV-19. *See also* Comments of DirecTV Broadband, CC Docket No. 01-337 (filed March 1, 2002) at 6 (“Only 1/3 of American homes can currently choose between wireline and cable broadband services.”).

⁴⁰ *See, e.g.*, California PUC Comments at 12 (noting that “one-third of all Californians live in cities where DSL service is the only choice for broadband service.”); Comments of EarthLink, CC Docket No. 01-337, at 19 (filed March 1, 2002); Comments of Competitive Telecommunications Association, CC Docket No. 01-337, at 11 (filed March 1, 2002) (“A recent GAO survey reported that in areas where broadband service is available, only 25.4 percent of the end users have a choice between cable modem and xDSL services.”).

⁴¹ Kelley Broadband Declaration ¶ 28. Even where cable services are available, there is no guarantee that the systems have been upgraded to offer cable modem services. *See DirecTV Order* ¶ 222 & n.526 (noting a recent Congressional report stating that “cable modem service is potentially available to an estimated 64 million households, leaving 40 million households without such access”) (citation omitted).

⁴² Kelley Broadband Declaration ¶ 29; HAI Report at 75.

a relatively small number of competitors, performance can suffer.⁴³ An increase in the number of firms from two to three or more can have a dramatic effect on prices.

Economic theory and empirical evidence from the telecommunications industry indicate that a duopoly will not be sufficient to ensure competition for broadband services.⁴⁴ For instance, in the five years since PCS providers were first allowed to compete with incumbent cellular providers (of which there were originally a maximum of two in each service area), pricing information collected by the FCC demonstrates that prices declined over 50 percent.⁴⁵ It is reasonable to infer that the change from two carriers to as many as six or seven carriers resulted in a dramatic increase in competition for the provision of wireless services.

The FCC has consistently recognized that each provider in a duopoly tends to retain significant market power. In fact, the FCC has never relied on the presence of two providers to make a finding that sufficient competition exists for a particular service.⁴⁶ For example, the FCC declined to declare AT&T non-dominant in the provision of interexchange services until long distance customers enjoyed “numerous choices” – including three facilities-based national competitors, dozens of regional facilities-based carriers, and hundreds of resellers.⁴⁷ Similarly, in the *LEC Classification Order*, the Commission relied upon the presence of large and well-established interexchange carriers to constrain any exercise of market power by the incumbent LECs in the provision of interexchange services.⁴⁸

⁴³ The BOCs’ own experts have concluded that oligopoly facilitates coordinated interaction among competitors. See Testimony of Jerry A. Hausman, on behalf of Pacific Bell (U 1001), *Request of MCI WorldCom, Inc. and Sprint Corporation for Approval to Transfer Control of Sprint Corporation's California Operating Subsidiaries to MCI WorldCom, Inc. Application No. 99-12-012* at 12 (Cal. PUC, May 19, 2000); Kelley Broadband Declaration ¶ 32.

⁴⁴ Kelley Broadband Declaration ¶ 32.

⁴⁵ *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Service*, 15 FCC Rcd 17660, 17678-80 (2000); *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Service*, 13 FCC Rcd 19746, 19769-70 (1998).

⁴⁶ See, e.g., Comments of WorldCom, Inc., CC Docket No. 01-337, at 12 (filed Mar. 1, 2002).

⁴⁷ *Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier*, Order, 11 FCC Rcd 3271, ¶¶ 69-72 (1995).

⁴⁸ *Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area*, Second Report and Order in CC Docket No. 96-149 and Third

More recently, as noted, the FCC designated the application to transfer licenses associated with the proposed EchoStar/DirecTV merger for a hearing before an administrative law judge based on its conclusion that a duopoly was insufficient to ensure competition and would result in severe harm to consumers. In Chairman Powell's own words, the "cornerstone" of the FCC's decision was that:

At best, th[e] merger would create a duopoly in areas served by cable; at worst it would create a merger to monopoly in unserved areas. Either result would decrease incentives to reduce prices, increase the risk of collusion, and inevitably result in less innovation and fewer benefits to consumers. That is the antithesis of what the public interest demands.⁴⁹

The FCC further noted that "[c]ourts applying the antitrust laws have not looked kindly on mergers to duopoly, especially in markets characterized by high barriers to entry, because those mergers often result in less competition, higher prices, less innovation, and fewer consumer benefits."⁵⁰

As the foregoing discussion makes clear, the presence of two competitors in select areas is simply not enough to guarantee the development of *any* competition, much less the kind of robust intermodal competition needed to justify a finding that competitors are not impaired without access to DSL-capable loops or to the high-frequency portion of loops.

D. If CLECs Are Denied Access to UNEs, the Effect Will Be Diminished Competition for Information Services

Competitive LECs, such as WorldCom and Covad, have deployed, and currently use, their own facilities to provide DSL service to independent ISPs serving primarily residential customers.⁵¹ These facilities, however, cannot be used to offer service absent unbundled access

Report and Order in CC Docket No. 96-61, 12 FCC Rcd 15756, ¶¶ 96-97 (1997) ("*LEC Classification Order*").

⁴⁹ See Statement of Chairman Michael K. Powell, CS Docket No. 01-348, at 1 (rel. Oct. 10, 2002) ("Powell Statement"); see also *DirecTV Order* ¶¶ 275-76 ("it is well recognized that competition . . . has the greatest potential to bring consumer welfare gains"), ¶ 280 (loss of competition by reducing number of viable service providers from three to two or two to one is likely to result in significant harm to consumers, "creating the potential for higher prices and lower service quality, and negative impacts on future innovation").

⁵⁰ See News Release, CS Docket No. 01-348, at 3 (rel. Oct. 10, 2002) ("News Release").

⁵¹ Notwithstanding the claims of the High Tech Broadband Coalition, the unbundling of elements necessary to provide DSL service, including the high frequency portion of the loop, has

to critical UNEs such as the loop and the high-frequency portion of the loop. As a practical matter, competitive carriers have no alternatives to these incumbent LEC-provided elements. Wireless and satellite facilities (as explained above) simply are not sufficiently widespread to be available to end users today or in the foreseeable future, let alone competitors, for the vast majority of services. Cable companies currently have no obligation to provide competitive carriers access to their facilities, and it is unlikely that the *status quo* will change in the near future.⁵² Whatever limited intermodal competition may exist, it has not enhanced competitive carriers' ability to provide broadband service without resorting to incumbent LEC facilities. To the contrary, as a number of commenters have demonstrated, the incumbent LECs' last-mile facilities remain a bottleneck that competitive carriers can neither duplicate nor bypass via access to alternative facilities.⁵³

Moreover, information service providers may have few alternatives to competitive LECs. Although the incumbent LECs currently have an obligation to provide DSL service to independent ISPs, incumbent LECs seek to eliminate that obligation in the *Broadband Framework* proceeding.⁵⁴ If the incumbent LECs succeed in that proceeding, it becomes even more critical that competitive LECs have access to the UNEs they need in order to continue to provision broadband service to independent ISPs. If competitive LECs are denied access to such

spurred competitive LECs to invest in substantial facilities throughout the nation, including DSLAMs, splitters, packet switching, and transport. *Compare* Graham Declaration ¶ 27, with *Notice of Oral Ex Parte Presentation*, High Tech Broadband Coalition, CC Docket No. 01-338, at 2 (Oct. 16, 2002). WorldCom, for instance, has purchased significant facilities in over 700 central offices across the country to take advantage of the opportunities line sharing provides. *See* Graham Declaration ¶ 27.

⁵² Even if cable companies were required to provide access to their facilities, neither cable companies nor any other entity could duplicate the BOCs' ubiquitous local networks and last-mile access to all telephone subscribers. *See* Covad Comments, CC Docket No. 01-338, at 27-28 (filed Apr. 5, 2002) ("Covad Comments").

⁵³ *See e.g.*, Covad Comments at 27-28, 35-36; Comments of the New York State Department of Public Service, CC Docket No. 01-338, at 3-7 (filed Apr. 4, 2002) ("New York Comments"); California PUC Comments at 7-8; Comments of the Indiana Utility Regulatory Commission, CC Docket No. 01-338, at 8 (filed Apr. 5, 2002).

⁵⁴ In the *Broadband Framework* proceeding, some BOCs have argued that stand-alone DSL service is "telecommunications" but not a "telecommunications service." *See, e.g.*, Verizon Comments, CC Docket No. 02-33, at 6-23 (filed May 3, 2002). If such an argument were accepted, incumbent LECs would no longer be required to provide unbundled DSL service to ISPs.

UNEs, independent ISPs are unlikely to have access to the transmission services they require to offer information services. The result would likely be that most residential customers would have a choice of, at most, two vertically integrated ISPs (the cable company and the incumbent LEC) for information services offered over broadband facilities.

As the Commission has recently noted, duopolies and monopolies decrease incentives to reduce prices, increase the risk of collusion, and inevitably result in less innovation and fewer benefits to consumers.⁵⁵ It is the number of competitors, rather than the vertical integration, that poses a threat to competition for residential broadband information services. If residential customers could choose among many (at least five or six) vertically integrated ISPs, it is likely that a wholesale market would develop for the underlying transmission services required by ISPs, and the Commission would no longer need to require incumbent LECs to provide UNEs to competitive DSL LECs. That day, however, has not yet arrived.

III. Line Sharing and Access to Incumbent LEC Loop Facilities Are Critical to Continued Availability of Competitive DSL

Line sharing is the only feasible way to erode the market power that incumbent LECs and cable companies currently exercise in the provision of broadband services, and to bring the resulting benefits of competition to consumers. As WorldCom has explained, it is not feasible for competitors to lease a second loop to provide voice-compatible DSL-based services. First, leasing a second loop is not possible in cases in which the incumbent LEC has only a single loop available to an end-user premise. Second, even where a second loop could be leased, doing so would place competitive carriers at an untenable disadvantage because competitive LECs would be limited to offering their data services over second lines, while the incumbent LECs would be free to offer DSL over the end user's existing voice line.⁵⁶ Third, as discussed in more detail below, the costs of providing service over a second line are substantially higher than over a shared loop.

As the Commission has previously found, if competitors are required to purchase or self-provision a second unbundled loop to provide voice-compatible DSL-based services, their provisioning costs will be materially higher than if they are able to offer service over the unbundled high-frequency portion of the loop.⁵⁷ The combined collocation and unbundled loop

⁵⁵ Powell Statement at 1; *see also* News Release at 1, 3.

⁵⁶ *See* California PUC Comments at 19; New York Comments at 7.

⁵⁷ *See Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, 14 FCC Rcd 20912, ¶¶ 40-41 (1999) ("*Line Sharing Order*").

costs, in addition to the incremental and fixed network, equipment, and overhead costs, mean that the competitive LEC seeking to deploy DSL service would have to offer it at a retail price that significantly exceeds the retail price for the comparable shared-line DSL that the incumbent offers to the same end-user customer. Moreover, incumbent LECs generally allocate virtually all loop costs to their voice services, then deploy a voice-compatible ADSL service on the same loop, allocating little or no incremental loop costs to the new resulting service.⁵⁸ In contrast, when the competitive LEC procures a second loop, it must pay the incumbent LEC the full price of that unbundled loop as an unbundled network element. Thus, the incumbent LEC's voice-compatible DSL service enjoys substantial cost advantages over a competitive LEC's DSL offerings.⁵⁹

IV. Conclusion

In order to promote robust competition for business and residential customers, as well as to support the continuation of a competitive information services market, the Commission should promulgate rules that will ensure that competitive carriers have unbundled access to the network elements they need to provide DSL services, including DSL-capable loops, the high frequency portion of loops, and DSL-capable fiber-fed loops. The Commission should likewise ensure that competitive carriers can engage in line splitting, and can offer voice service over loops that carry incumbent LEC DSL service.

Sincerely,

/s/ Kimberly Scardino

Kimberly Scardino
Senior Counsel
(202)736-6478

cc: Christopher Libertelli
Jordan Goldstein
Michelle Carey
Elizabeth Yockus
Jeremy Miller
Julie Veach

Matthew Brill
William Maher
Thomas Navin
Cathy Carpino
Daniel Shiman

Daniel Gonzalez
Kyle Dixon
Brent Olson
Michael Engel
Robert Tanner

⁵⁸ *Id.*; see also WorldCom UNE Reply Comments at 92, n.288.

⁵⁹ These facts were accepted by the Commission in the *Line Sharing Order*, and remain true today.